

Title (en)

System and method for impulse noise suppression for integrator-based ion current signal processor

Title (de)

System und Verfahren zur Rauschimpulsunterdrückung für einen Ionenstromsignalprozessor mit Integrator

Title (fr)

Système et méthode pour la suppression de bruit impulsionnel pour processeur de signaux de courant ionique avec intégrateur

Publication

EP 1342915 A2 20030910 (EN)

Application

EP 03075463 A 20030218

Priority

US 9124602 A 20020304

Abstract (en)

An impulse noise suppression circuit (40) for an integrator-based ion current signal processing system includes a one-shot circuit (56) activated by a trigger signal (54) that is produced when a noise transient (44) in a bandpass filtered ion current signal exceeds a predetermined threshold. The output pulse (86) of the one-shot circuit is selected to have a pulse width (T) configured to mask a substantial portion of the noise transient (44) without masking the remaining filtered ion current signal during the remainder of a knock window (KWI) in which knock is detected.

IPC 1-7

F02P 17/12; **G01L 23/22**

IPC 8 full level

F02P 17/12 (2006.01); **G01L 23/22** (2006.01)

CPC (source: EP US)

F02P 17/12 (2013.01 - EP US); **G01L 23/221** (2013.01 - EP US); **G01L 23/225** (2013.01 - EP US); **F02P 2017/128** (2013.01 - EP US)

Citation (applicant)

US 5534781 A 19960709 - LEE ANSCN [US], et al

Cited by

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DE FR GB

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EP 1342915 A2 20030910; **EP 1342915 A3 20040609**; **EP 1342915 B1 20070328**; DE 60312757 D1 20070510; DE 60312757 T2 20070816; US 2003164025 A1 20030904; US 6722183 B2 20040420

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